

Supporting Information

Personalized, Disease-Specific Protein Corona Influences the Therapeutic Impact of Graphene Oxide

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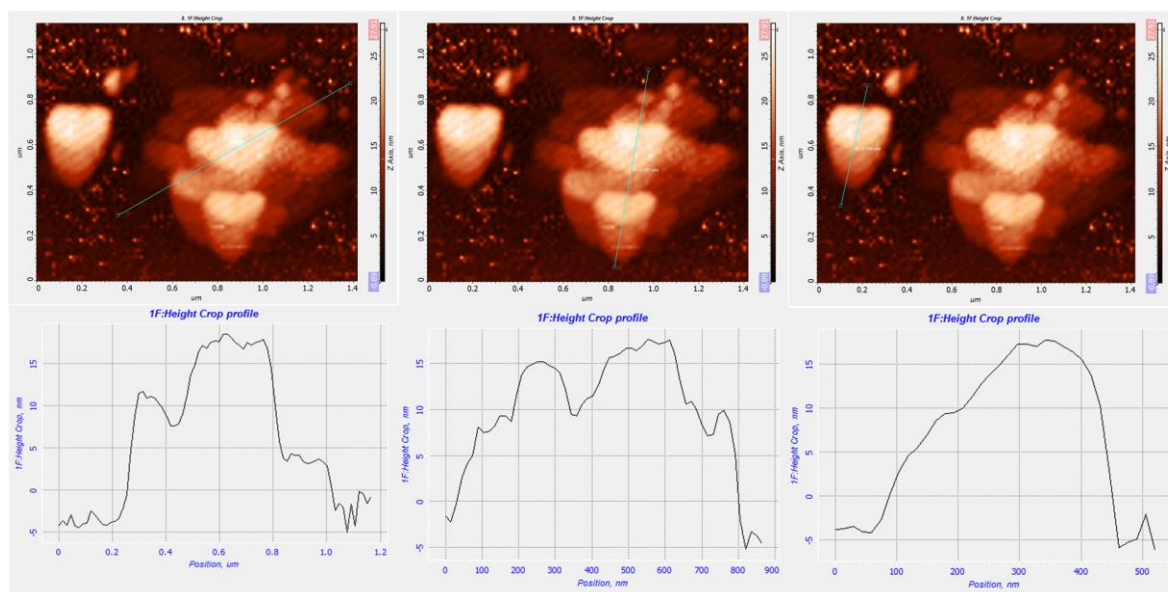


Figure S1. AFM images of hard corona coated CCGO sheets (5% plasma) obtained from diabetic patient (top panels) and their correspondence height profiles distribution (bottom panel).

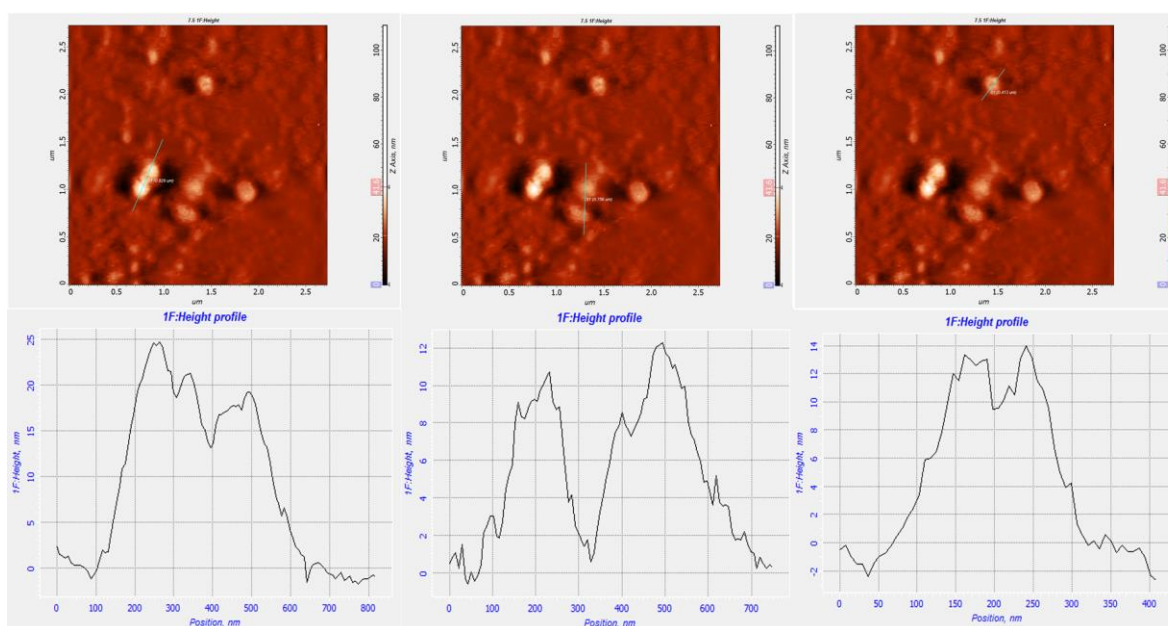
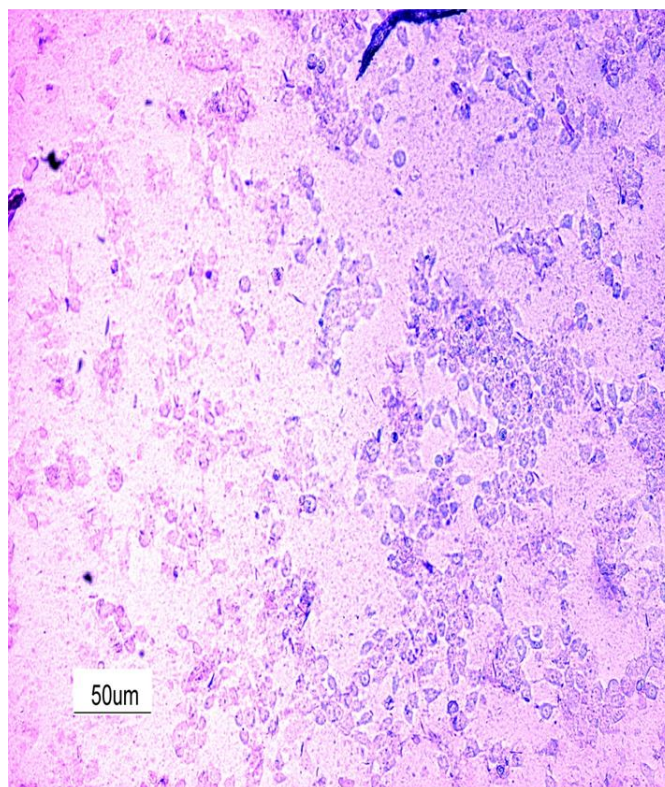


Figure S2. AFM images of hard corona coated CCGO sheets (5% plasma) obtained from hypofibrinogenemia patient (top panels) and their correspondence height profiles distribution (bottom panel).

Healthy 5%, MCF-7



Healthy 50%, MCF-7

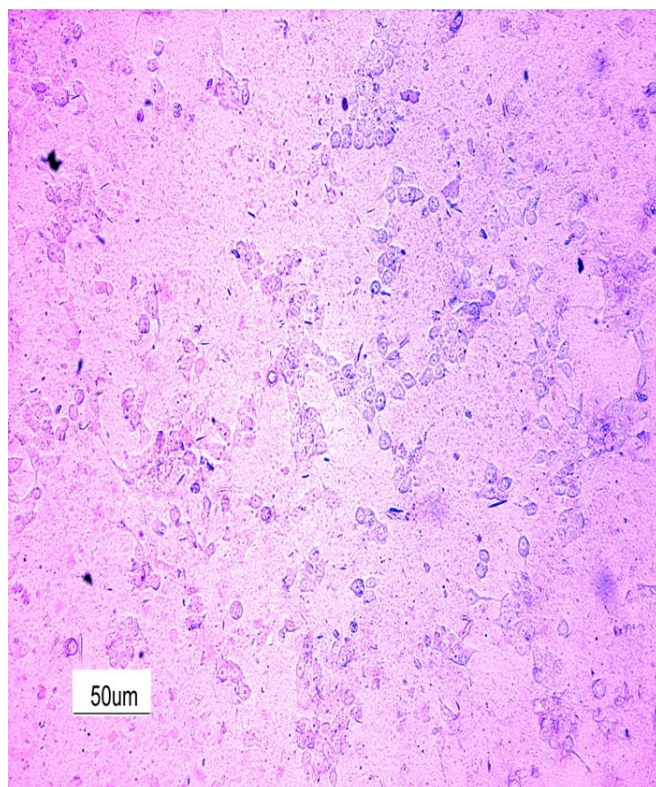
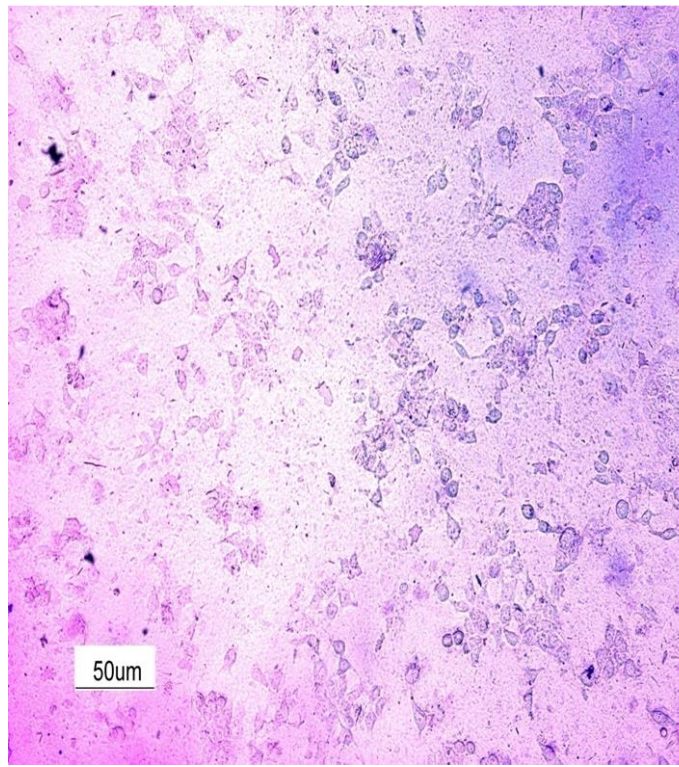


Figure S-3 A). Morphological states of MCF-7 cells after incubation (24 h) with corona coated CCGO obtained from healthy subjects (P 5% and P50%).

Pregnancy 5%, MCF-7



Pregnancy 50%, MCF-7

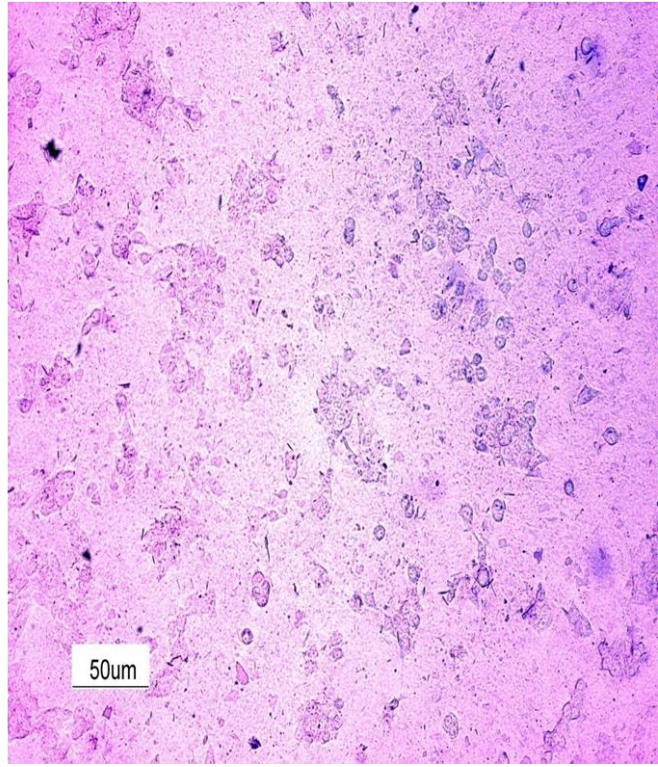
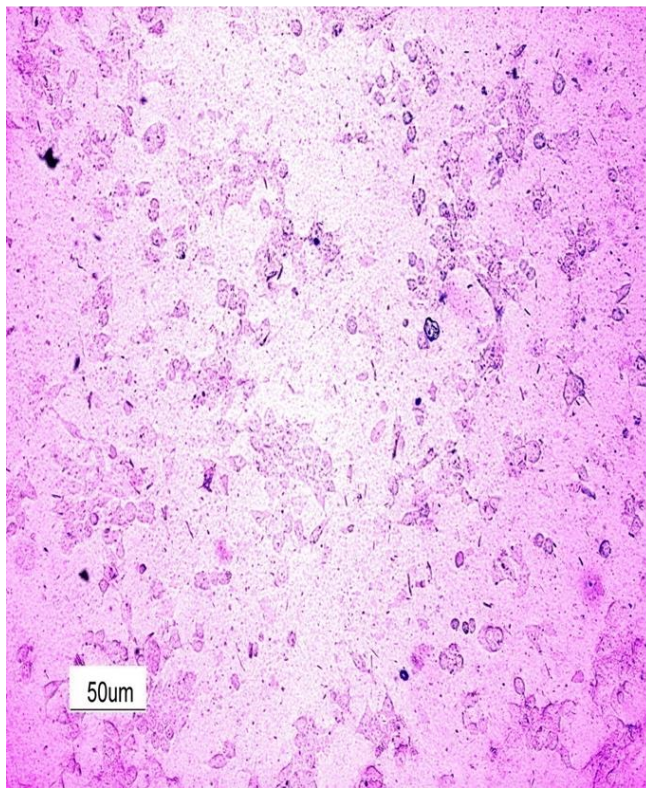


Figure S-3 B). Morphological states of MCF-7 cells after incubation (24 h) with corona coated CCGO obtained from pregnancy subjects (P 5% and P50%).

Diabetes 5%, MCF-7



Diabetes 50%, MCF-7

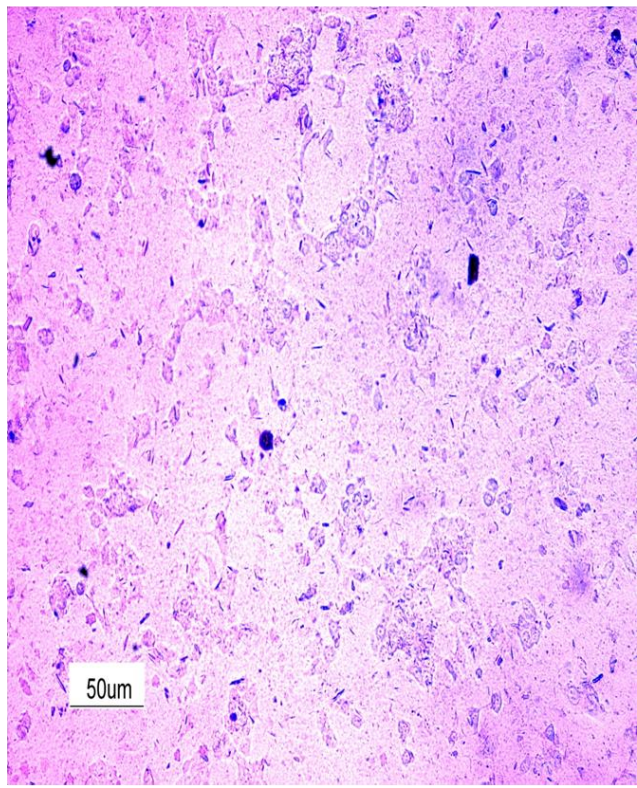


Figure S-3 C). Morphological states of MCF-7 cells after incubation (24 h) with corona coated CCGO obtained from diabetic patients (P 5% and P50%).

Hypercholesterolemia 5%, MCF-7

Hypercholesterolemia 50%, MCF-7

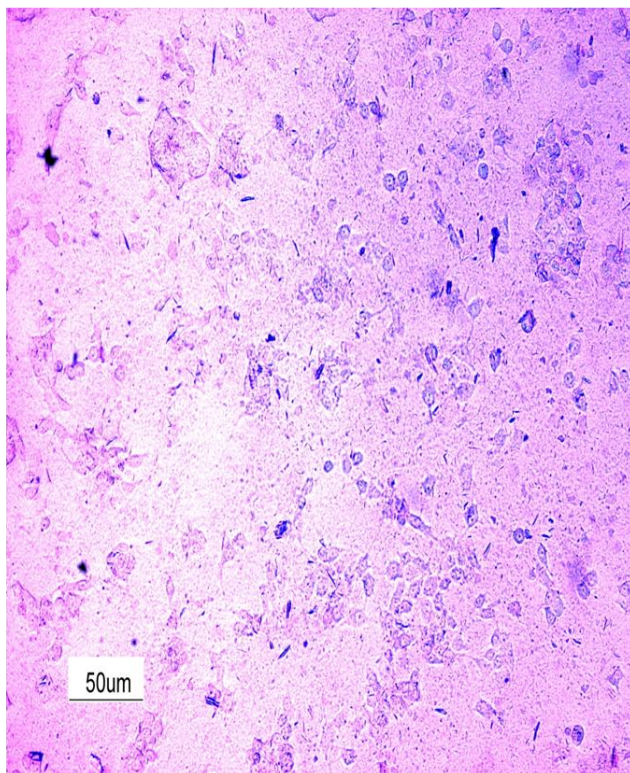
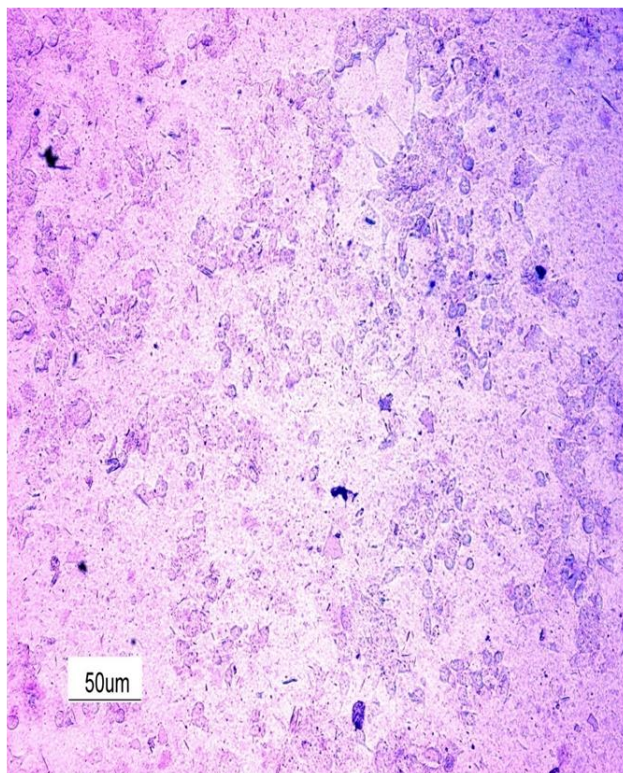
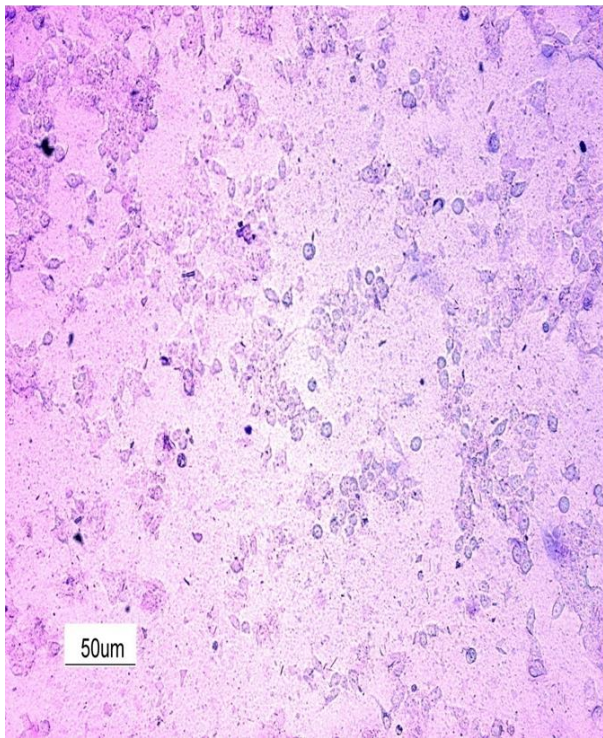


Figure S-3 D). Morphological states of MCF-7 cells after incubation (24 h) with corona coated CCGO obtained from hypercholesterolemia patients (P 5% and P50%).

Rheumatism 5%, MCF-7



Rheumatism 50%, MCF-7

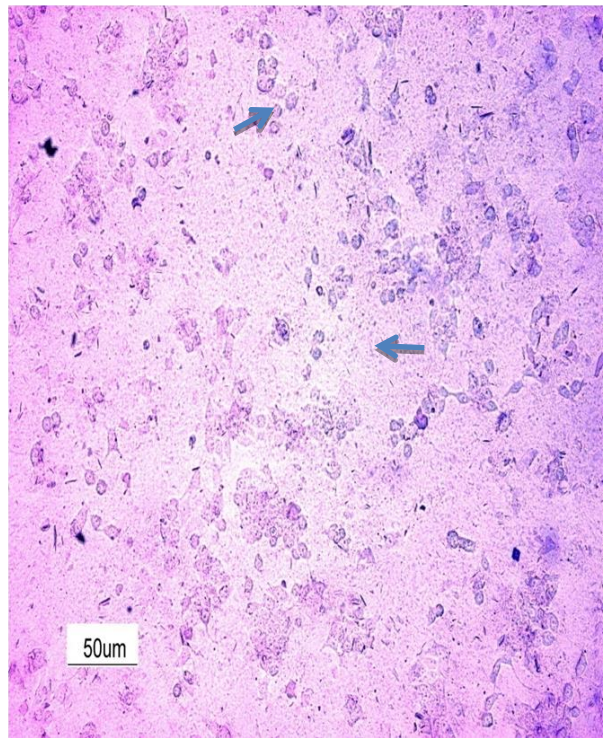
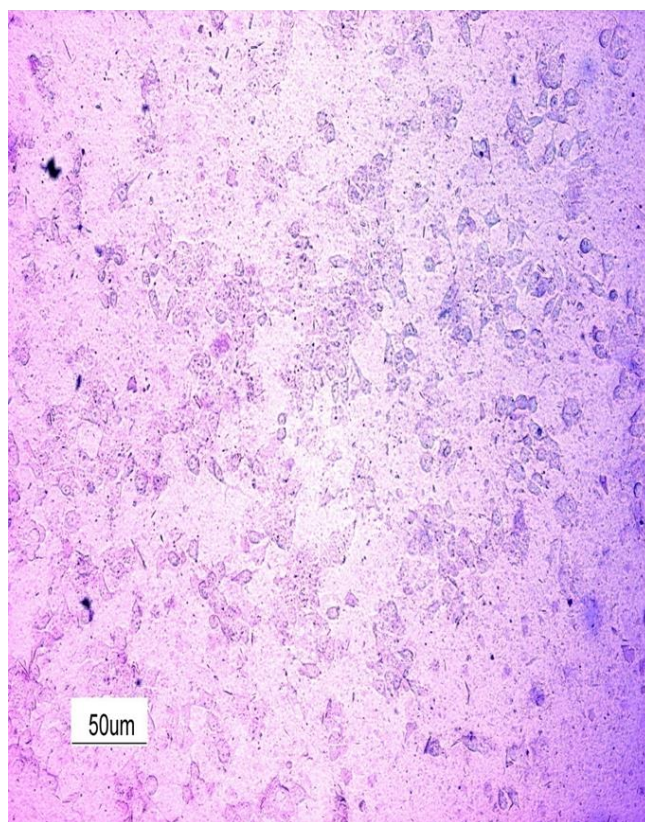


Figure S-3 E). Morphological states of MCF-7 cells after incubation (24 h) with corona coated CCGO obtained from rheumatism patients (P 5% and P50%).

Thalassemia Minor 5%, MCF-7



Thalassemia Minor 50%, MCF-7

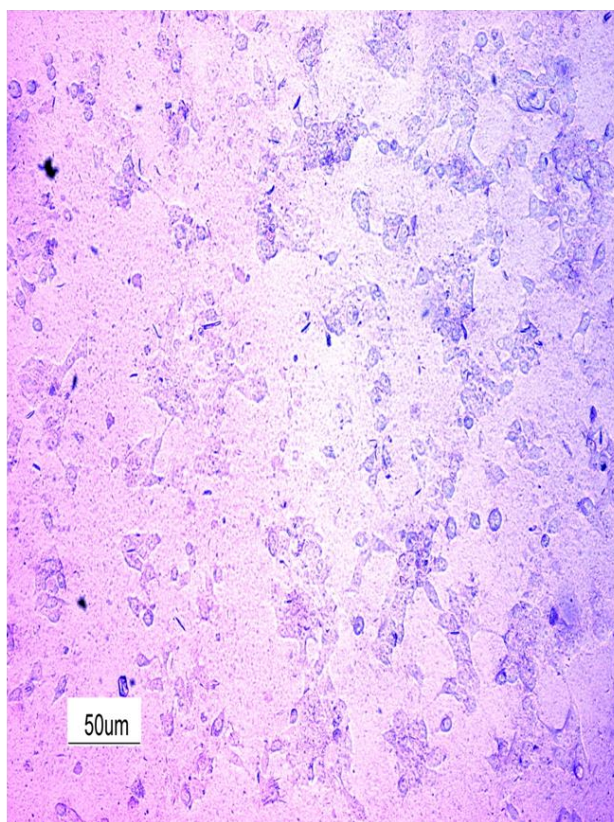
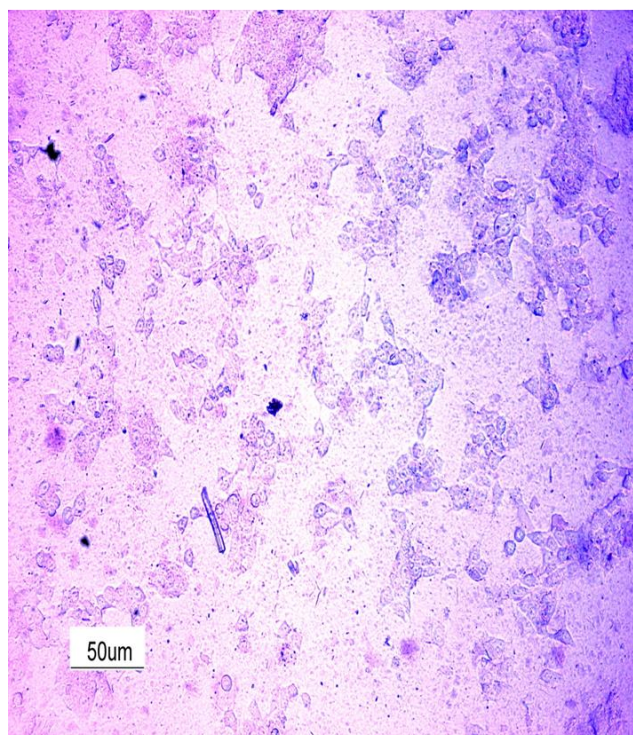


Figure S-3 F). Morphological states of MCF-7 cells after incubation (24 h) with corona coated CCGO obtained from thalassemia minor patients (P 5% and P50%).

Thalassemia Major 5%, MCF-7



Thalassemia Major 50%, MCF-7

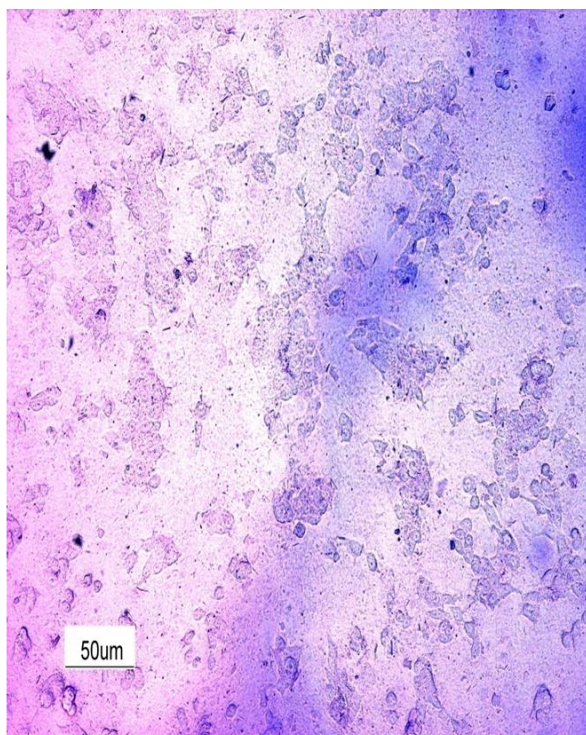
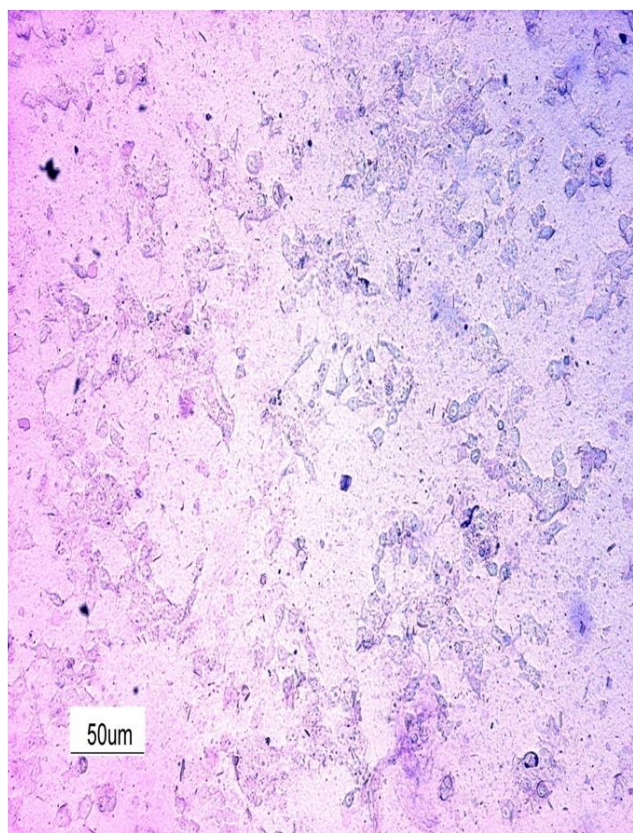


Figure S-3 G). Morphological states of MCF-7 cells after incubation (24 h) with corona coated CCGO obtained from thalassemia major patients (P 5% and P50%).

Fauvism 5%, MCF-7



Fauvism 50%, MCF-7

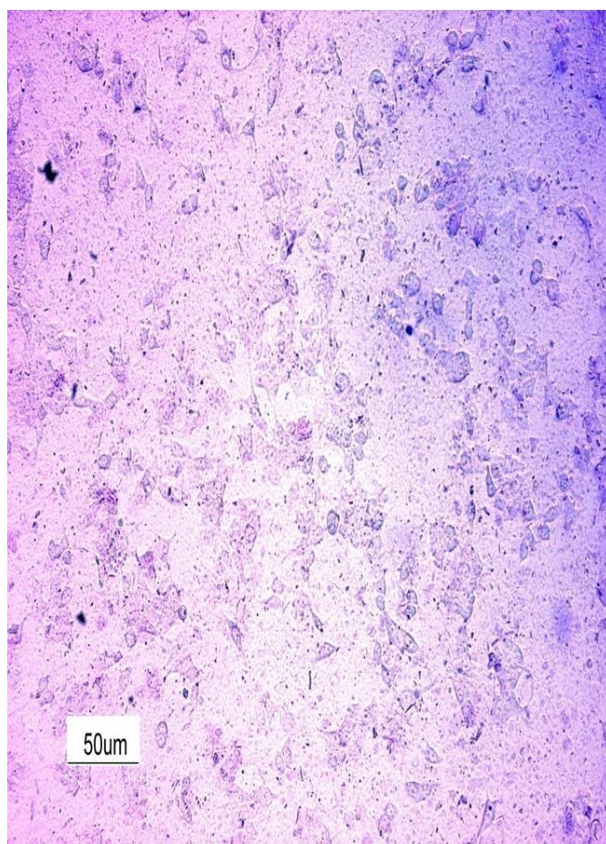
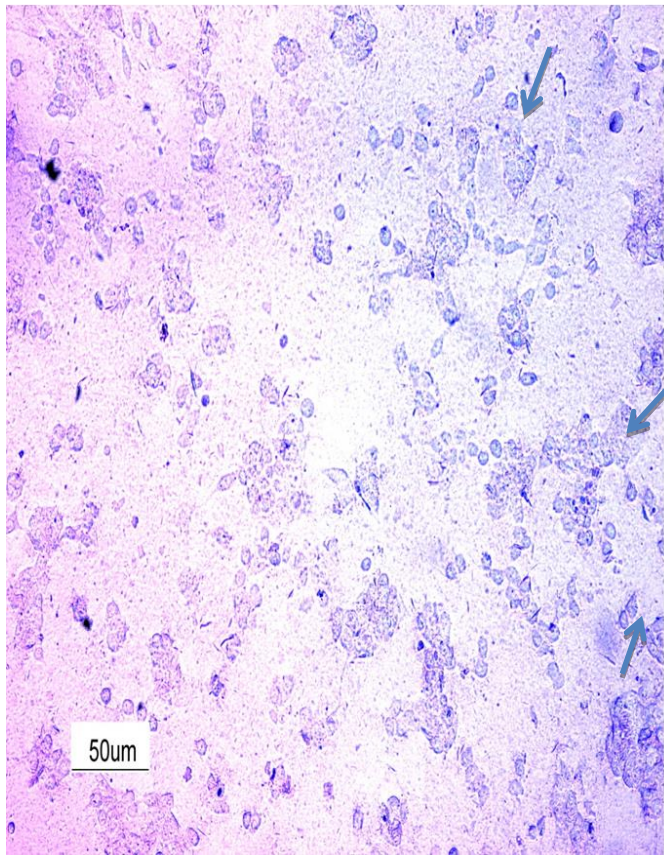


Figure S-3 H). Morphological states of MCF-7 cells after incubation (24 h) with corona coated CCGO obtained from fauvism patients (P 5% and P50%).

Blood cancer 5%, MCF-7



Blood cancer 50%, MCF-7

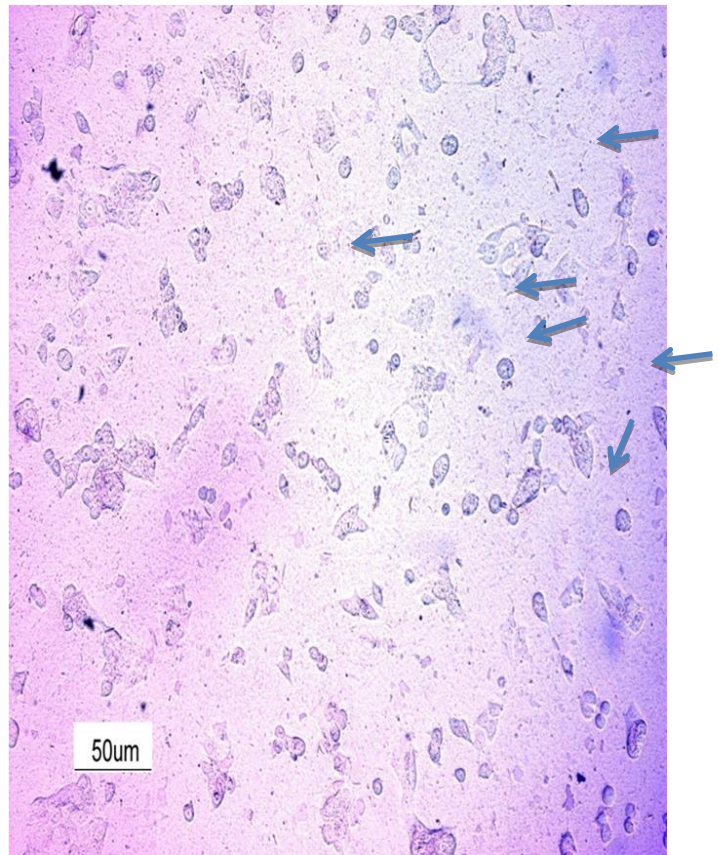
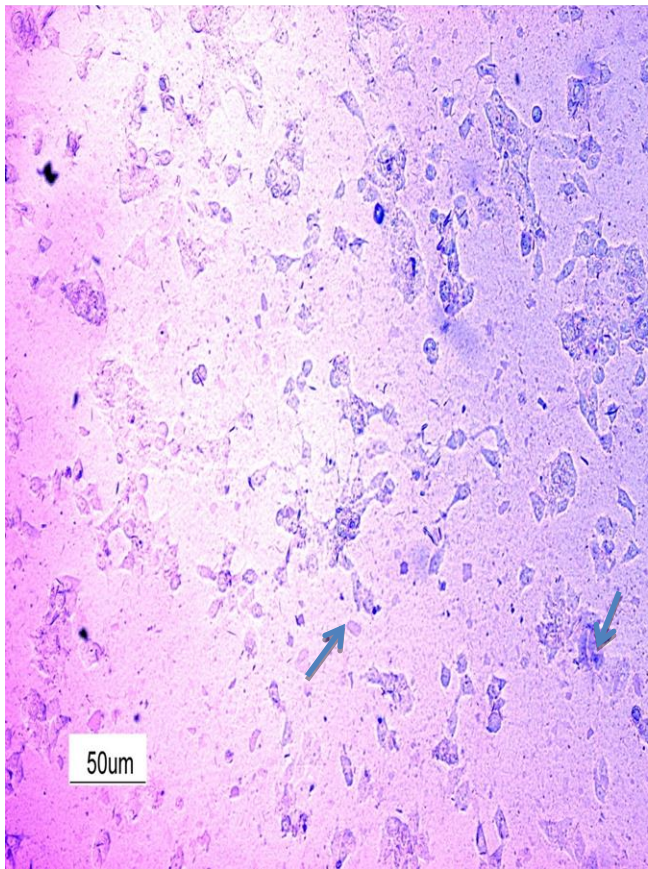


Figure S-3 I). Morphological states of MCF-7 cells after incubation (24 h) with corona coated CCGO obtained from blood cancer patients (P 5% and P50%).

Hypofibrinogen 5%, MCF-7



Hypofibrinogen 50%, MCF-7

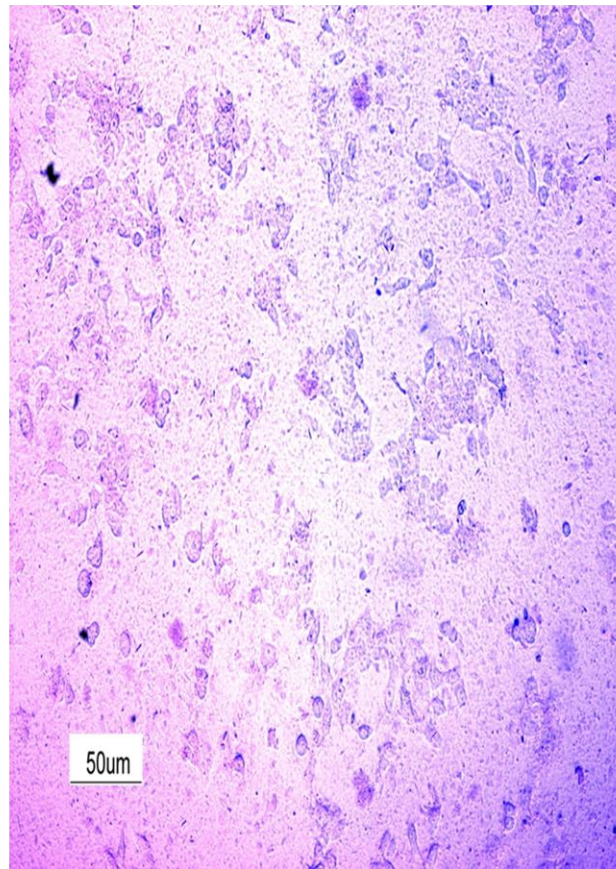


Figure S3 J). Morphological states of MCF-7 cells after incubation (24 h) with corona coated CCGO obtained from hypofibrinogenemia patients (P 5% and P50%).

MCF-7 cell-CONTROL (Nontreated)

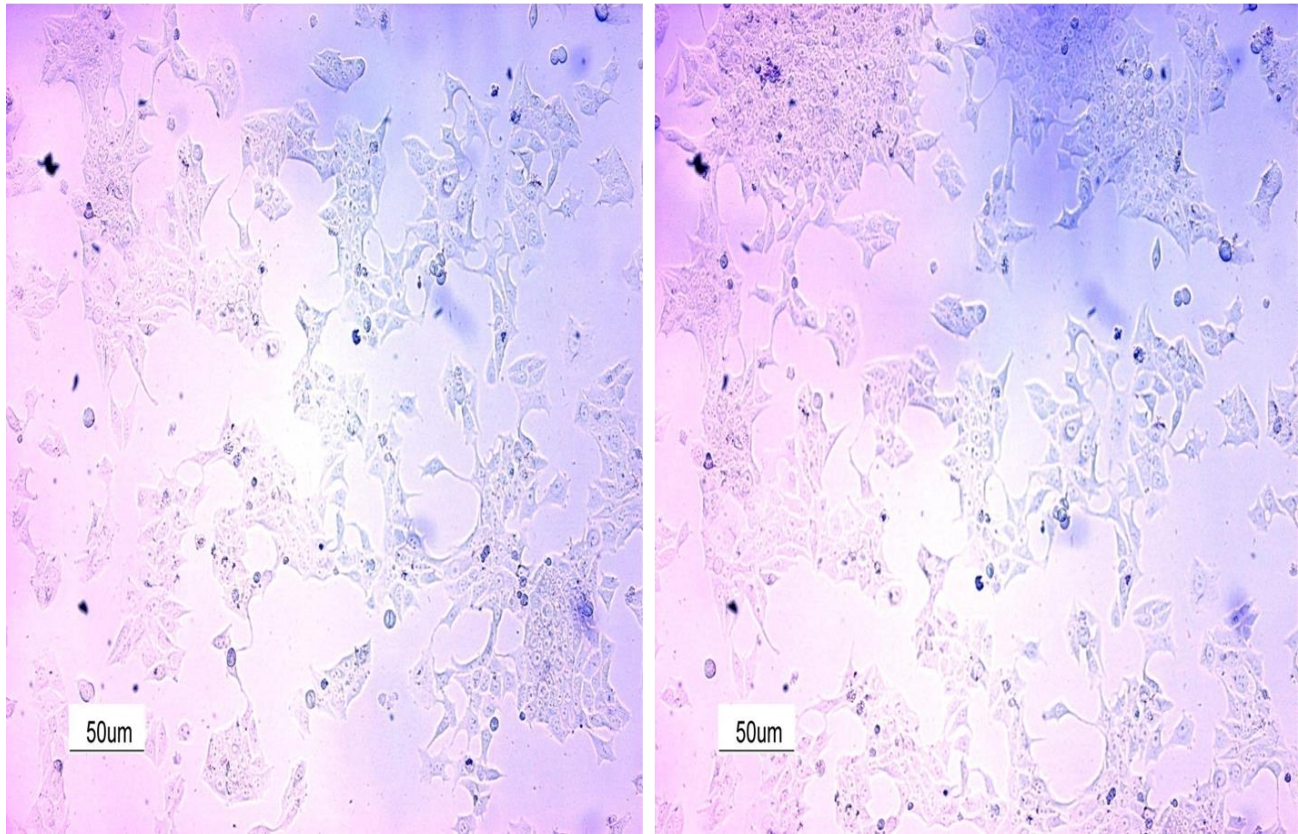
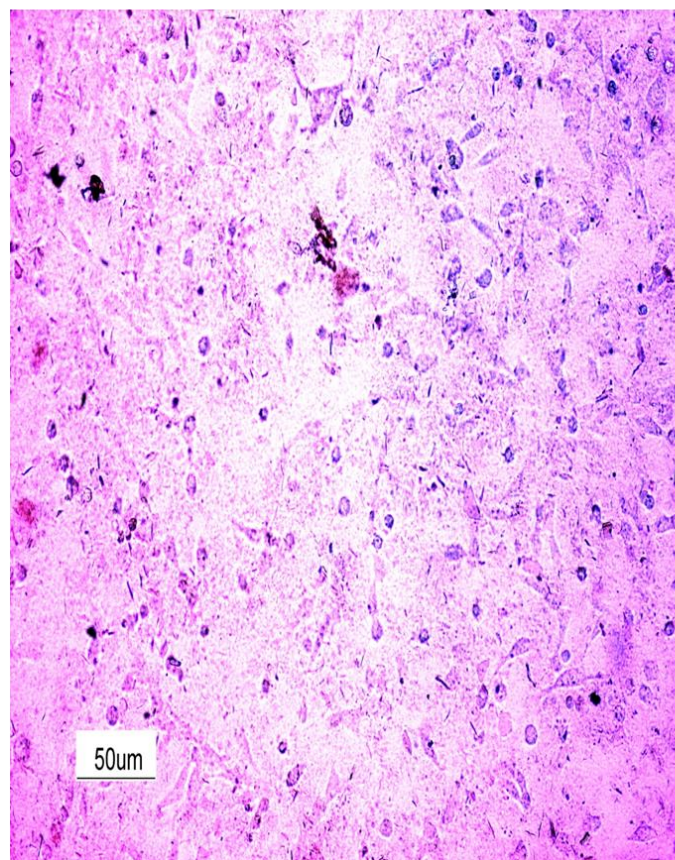


Figure S3 K). Morphological states of control MCF-7 cells.

Healthy 5%, MDA-MB 231



Healthy 50%, MDA-MB 231

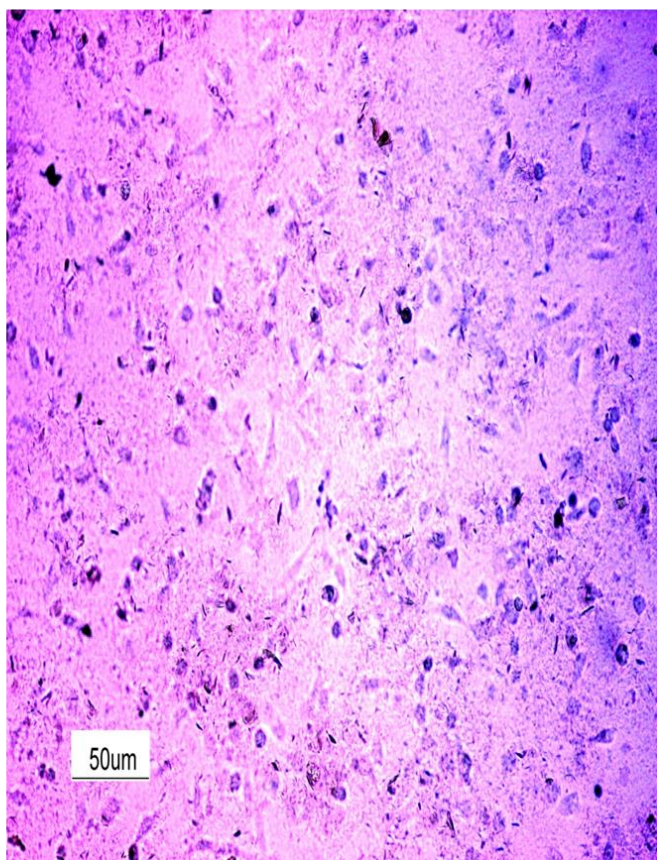
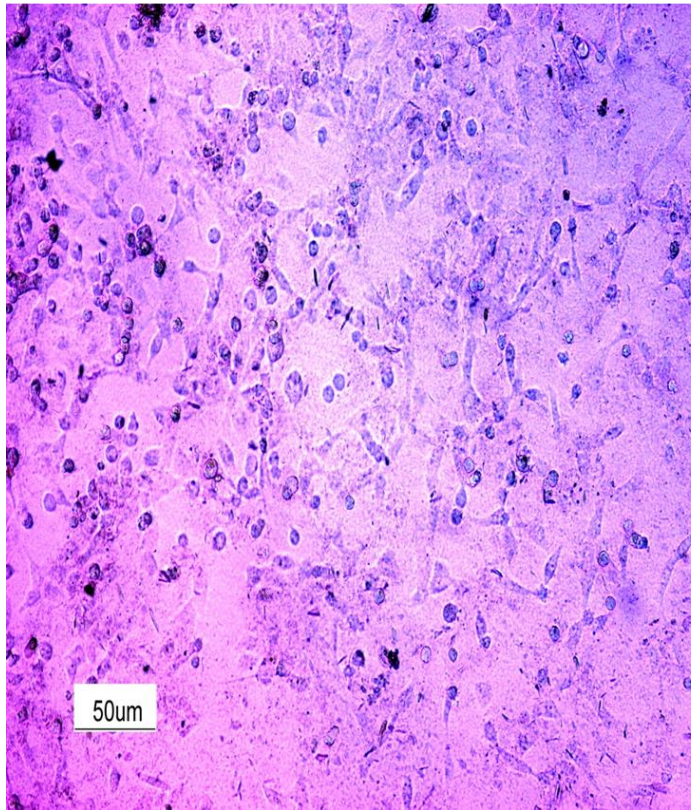


Figure S4 A). Morphological states of MDA-MB-231 cells after incubation (24 h) with corona coated CCGO obtained from healthy subjects (P 5% and P50%).

Pregnancy 5%, MDA-MB 231



Pregnancy 5%, MDA-MB 231

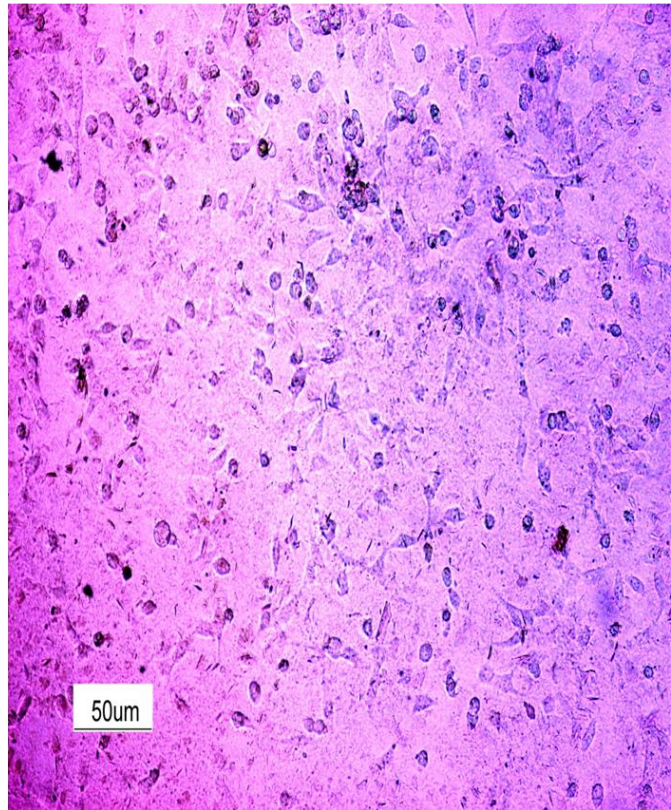
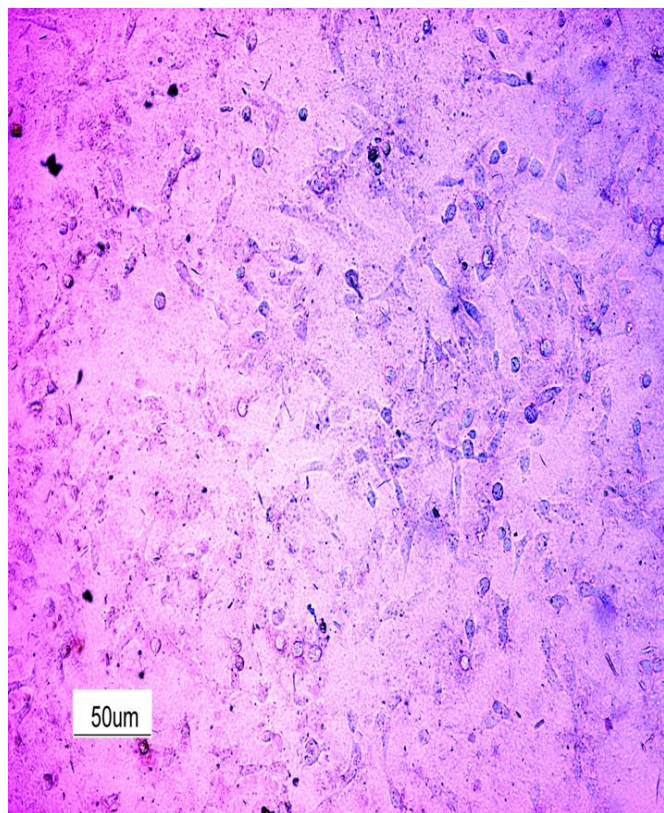


Figure S4 B). Morphological states of MDA-MB-231 cells after incubation (24 h) with corona coated CCGO obtained from pregnancy subjects (P 5% and P50%).

Diabetes 5%, MDA-MB 231



Diabetes 50%, MDA-MB 231

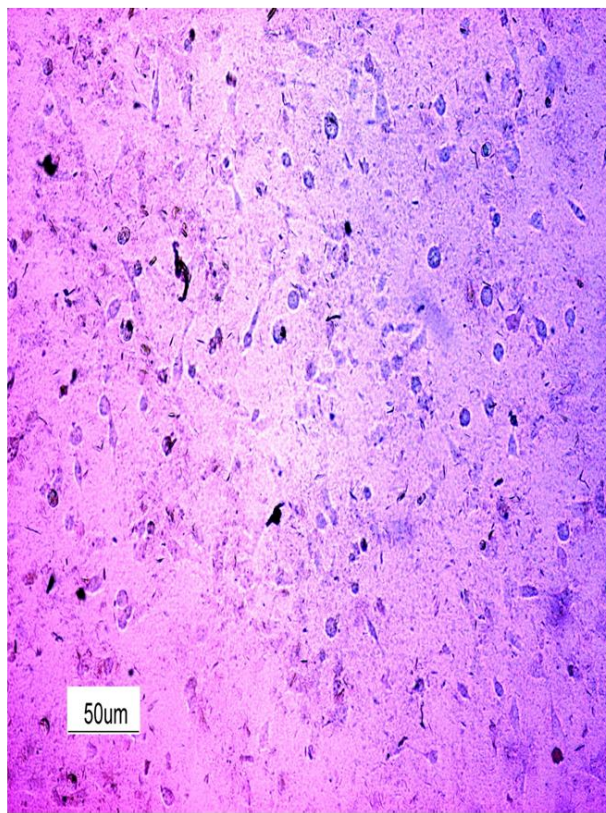


Figure S4 C). Morphological states of MDA-MB-231 cells after incubation (24 h) with corona coated CCGO obtained from diabetic patients (P 5% and P50%).

Hypercholesterolemia 5%, MDA-MB 231 Hypercholesterolemia 50%, MDA-MB 231

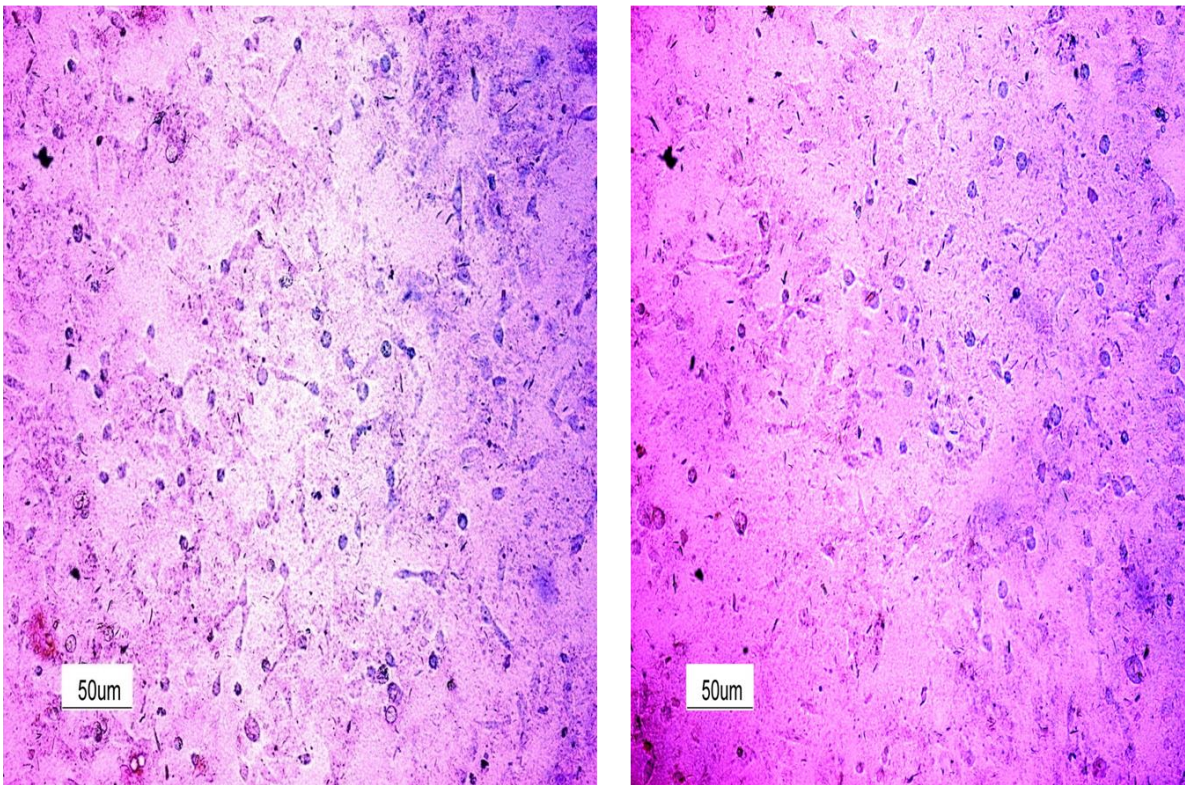
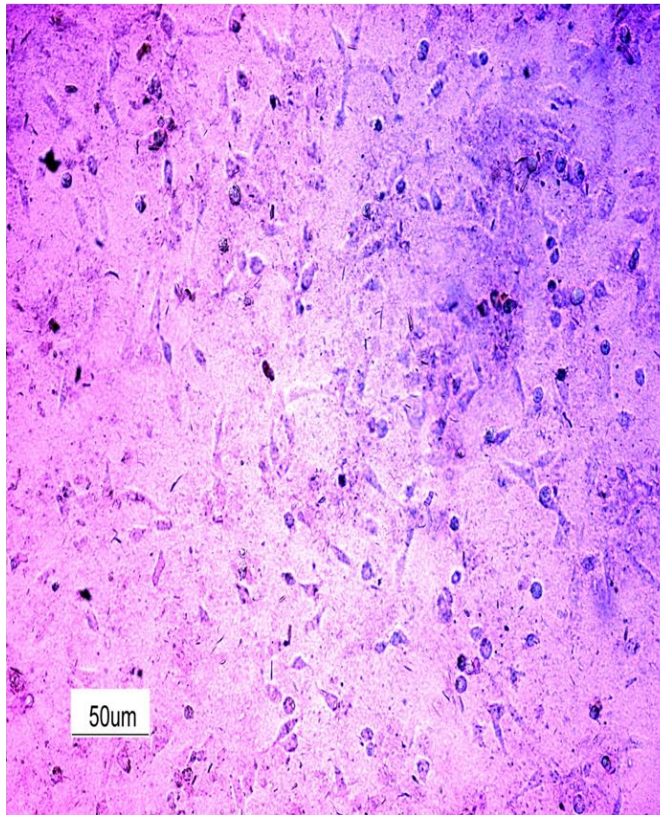


Figure S4 D). Morphological states of MDA-MB-231 cells after incubation (24 h) with corona coated CCGO obtained from hypercholesterolemia patients (P 5% and P50%).

Rheumatism 5%, MDA-MB 231



Rheumatism 5%, MDA-MB 231

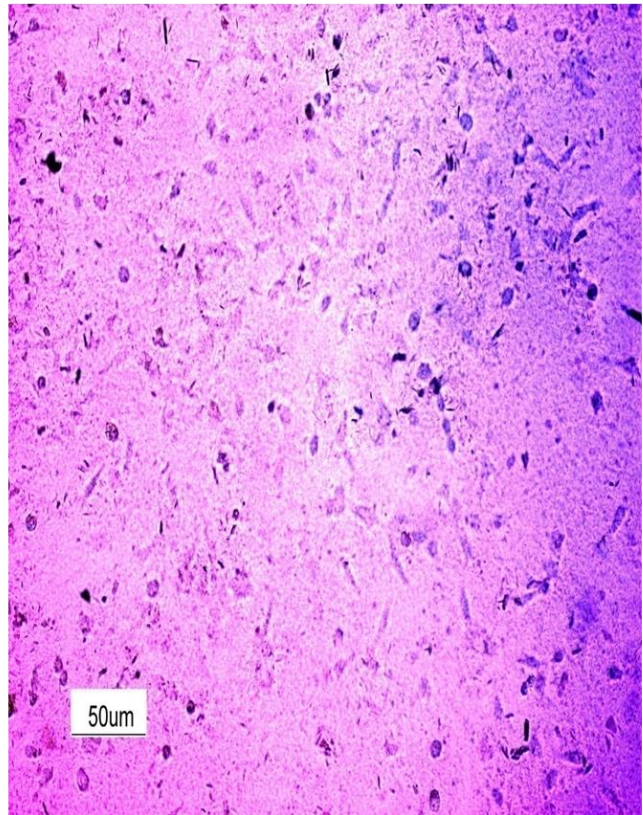


Figure S4 E). Morphological states of MDA-MB-231 cells after incubation (24 h) with corona coated CCGO obtained from rheumatism patients (P 5% and P50%).

Thalassemia minor 5%, MDA-MB 231

Thalassemia minor 5%, MDA-MB 231

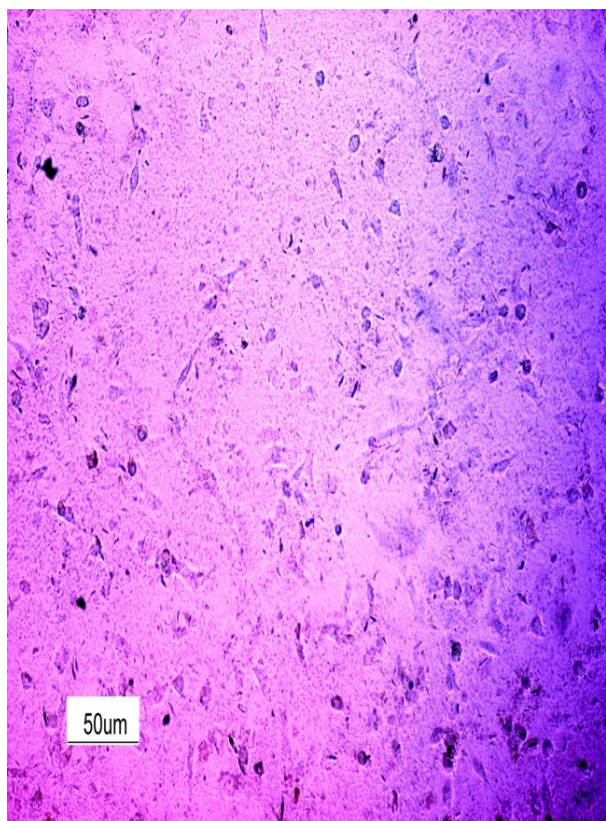
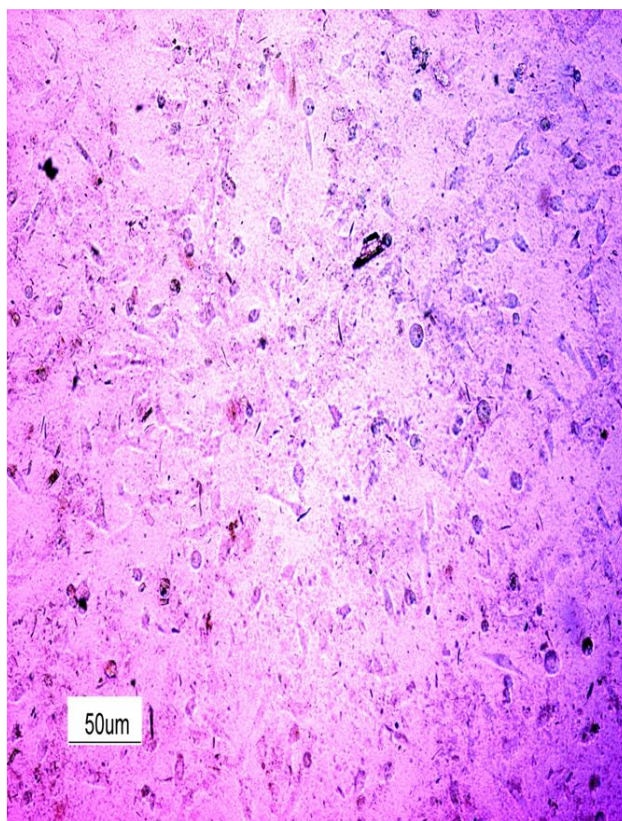
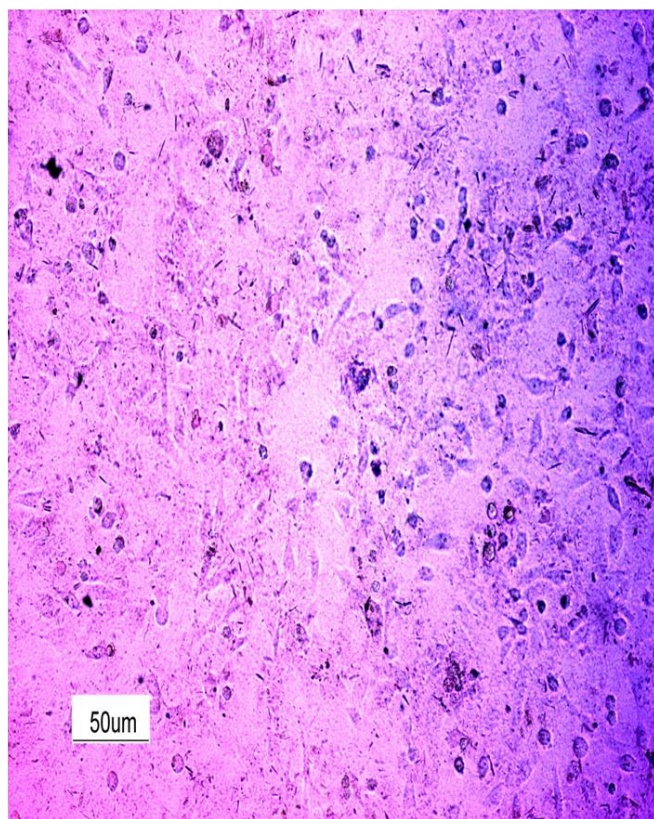


Figure S4 F). Morphological states of MDA-MB-231 cells after incubation (24 h) with corona coated CCGO obtained from thalassemia minor patients (P 5% and P50%).

Thalassemia major 5%, MDA-MB 231



Thalassemia major 50%, MDA-MB 231

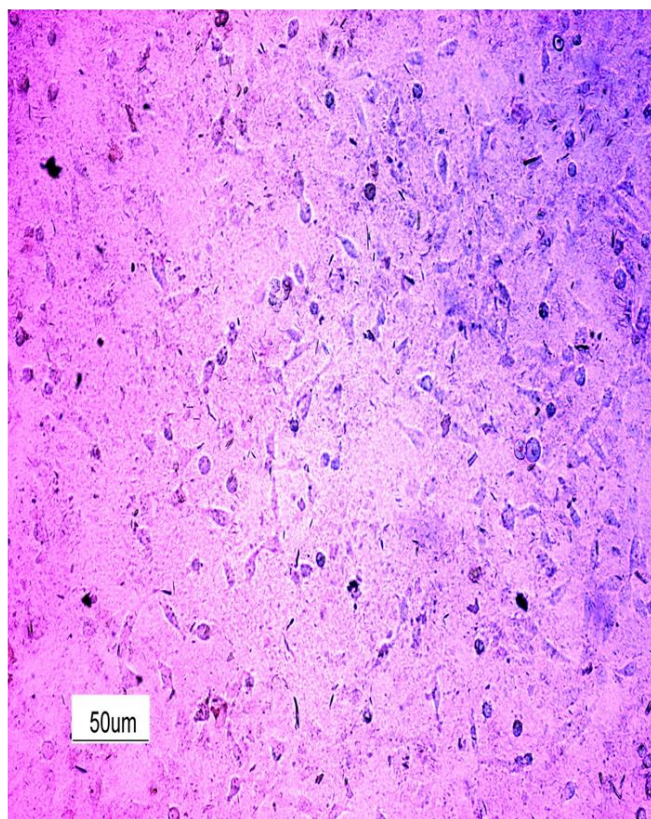
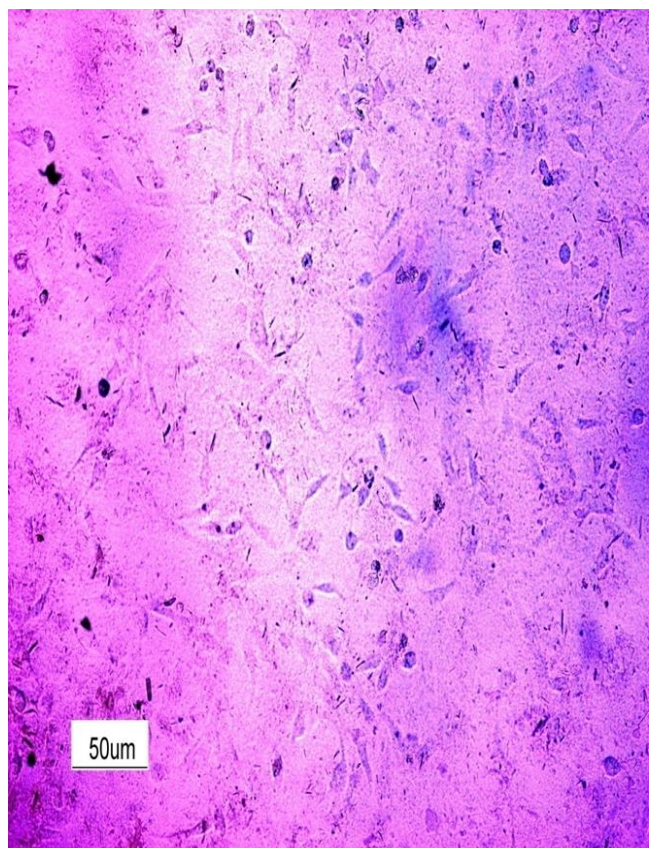


Figure S4 G). Morphological states of MDA-MB-231 cells after incubation (24 h) with corona coated CCGO obtained from thalassemia major patients (P 5% and P50%).

Fauvism 5%, MDA-MB 231



Fauvism 5%, MDA-MB 231

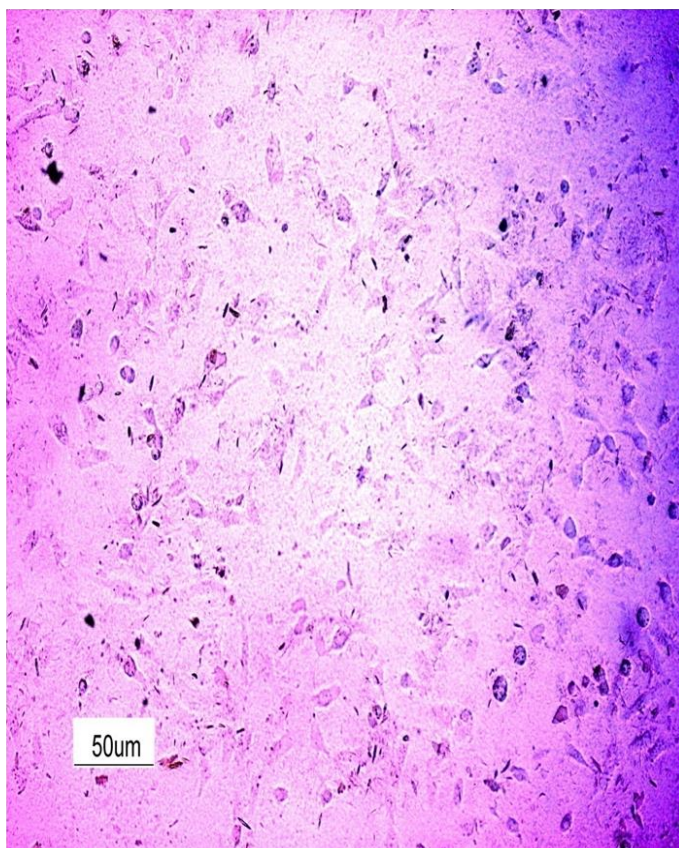
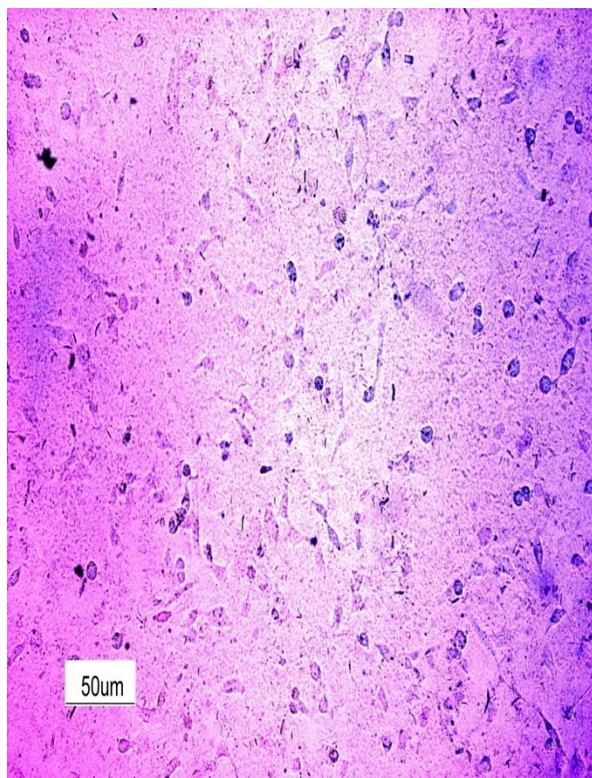


Figure S4 H). Morphological states of MDA-MB-231 cells after incubation (24 h) with corona coated CCGO obtained from fauvism patients (P 5% and P50%).

Blood cancer 5%, MDA-MB 231



Blood cancer 50%, MDA-MB 231

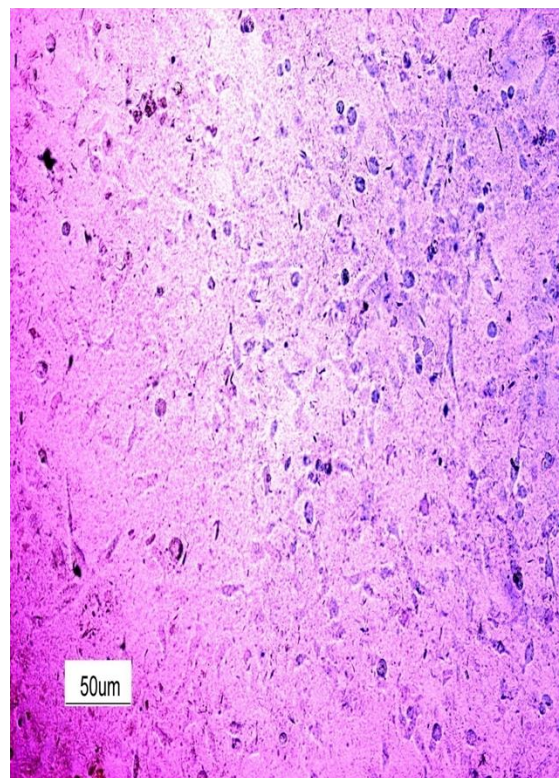


Figure S4 I). Morphological sates of MDA-MB-231 cells after incubation (24 h) with corona coated CCGO obtained from blood cancer patients (P 5% and P50%).

Hypofibrinogenemia 5%, MDA-MB 231

Hypofibrinogenemia 5%, MDA-MB 231

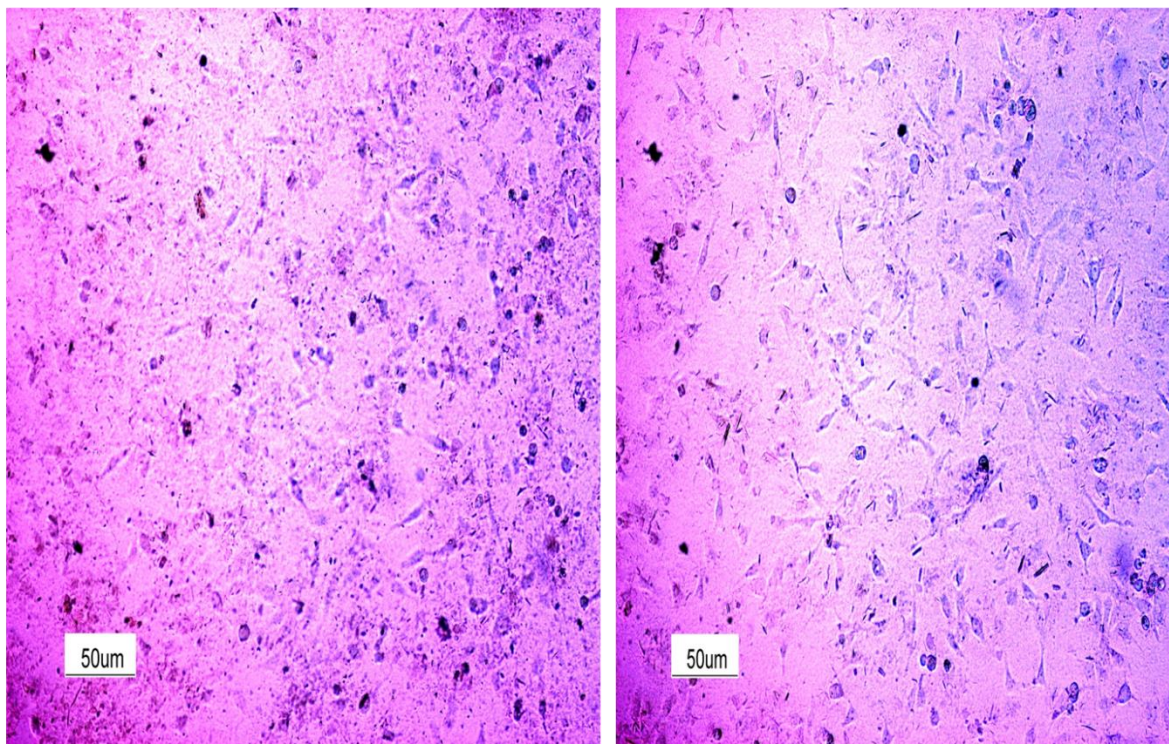


Figure S4 J). Morphological states of MDA-MB-231 cells after incubation (24 h) with corona coated CCGO obtained from hypofibrinogenemia patients (P 5% and P50%).

MDA-MB 231 Control (Nontreated)

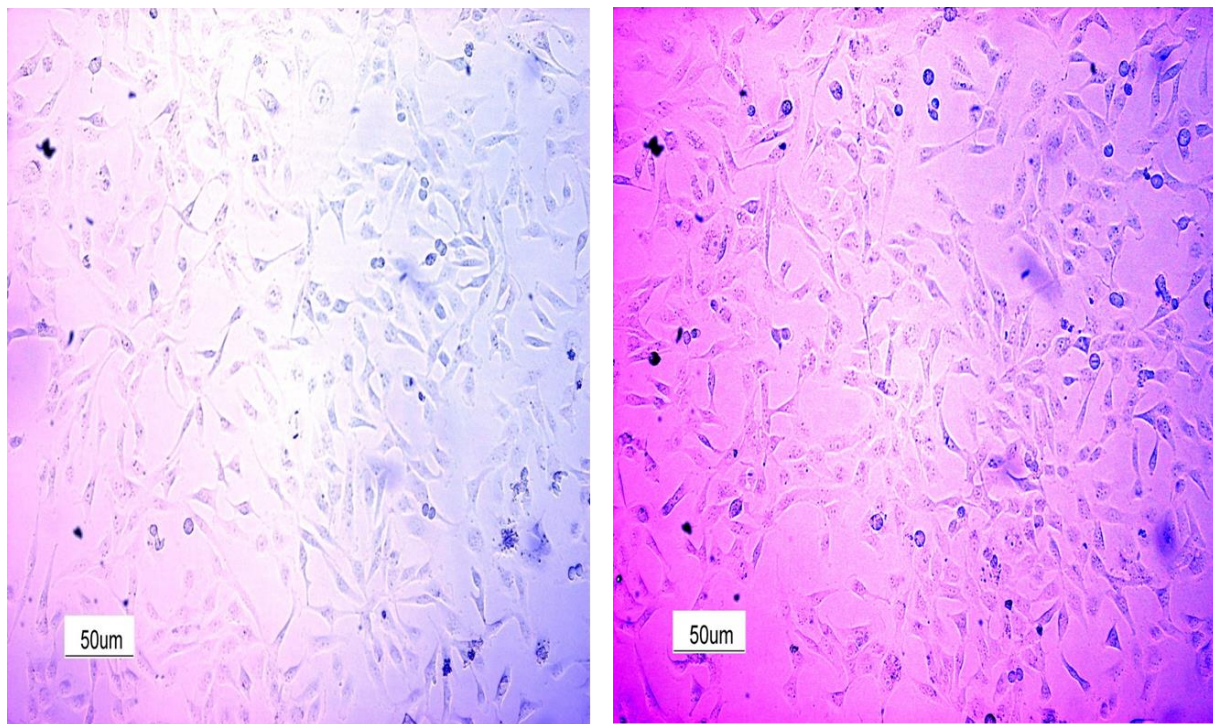


Figure S4 K). Morphological sates of control MDA-MB-231 cells.